

Att. Dkt. No. 035451-0198 (3550.Palm) (fka 025782-0102)

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

No claims are currently being amended.

A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-13 and 15-30 remain pending in this application.

In paragraphs 1 and 2 of the Office Action, claims 1-13 and 15-30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,915,295 (Crocker) in view of U.S. Patent No. 5,793,385 (Nale) and U.S. Patent No. 5,712,664 (Reddy). The Examiner states:

Crocker teaches a computing device comprising a communication bus . . . ; a display; . . . a process; . . . ; a display controller

It is noted that Crocker fails to explicitly suggest or teach "changing of display mode and allocating more memory without reboot the system (during operation of application)". This is what Nale teaches . . . However, the combined system fails to explicitly teach or suggest the memory includes an internal RAM and an external RAM for allocating between the two. This is what Reddy teaches (Fig. 2). Reddy teaches an integrated graphics display memory element including both a graphics accelerator (110) and an on chip frame buffer (112) and an off chip frame buffer (114). The graphics accelerator distributes and/or controls both the internal and external RAMs. It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the teachings of internal and external RAMs into the combined system of Crocker and Nale in order to increase the performance of the graphics display system because display data retrieval from on-chip frame buffer is much faster from external frame buffer and also reduce on-chip power dissipation that is

Atty. Dkt. No. 035451-0198 (3550.Palm) (fka 025782-0102)

especially critical in hand held portable, possibly wireless, products where battery life is a primary essential operational issue; and thus achieving system performance. The integrated solution allows the display memory sign to be expanded by adding external memory so that large displays can be accommodated on an as needed basis as taught by Reddy Therefore, at least claims 1-4 and 15-20 would have been obvious.

Applicants respectfully traverse the rejection. Nale, Reddy and Crocker are referred to below as the cited art.

As discussed in the previous Office Action, independent claims 1, 15 and 22 recite a structure that configures both internal display random access memory and external memory according to a display mode (color/resolution) during operation of the computing device. As admitted by the Examiner, neither Crocker nor Nale disclose an internal and external memory, much less an internal and external memory that is configured in accordance with the subject matter of claims 1, 15 and 22. The Examiner relies on Reddy to disclose or suggest an on-chip and off-chip memory.

Applicants respectfully submit that the combination of Reddy with the combination of Crocker and Nale to teach the present invention is improper for at least three reasons. First, there is no suggestion to combine Reddy with the combination of Crocker and Nale. Second, Reddy teaches away from the present invention and the combination of Crocker and Nale. Third, combining the teachings of Reddy with the combination of Crocker and Nale would destroy the intended purpose of Reddy. Although this response focuses on the combination of Reddy with the combination of Crocker and Nale, Applicants reserve the right to argue the appropriateness of the combination of Crocker and Nale in future responses.

First, Reddy does not show, describe or suggest the use of the off-chip and on-chip memory to accommodate display modes such as color and resolution modes. Rather, the on-chip and off-chip memory of Reddy appears to be utilized for the use of fast moving display portions and to accommodate different CRT sizes. See Reddy, col. 3, lines 39-50. The use of internal and

Atty. Dkt. No. 035451-0198 (3550.Palm) (fka 025782-0102)

external memory for fast moving portions of the display and display size is not teaching the use of internal and external memory configurations for color and resolution display modes. Accordingly, there is no suggestion to link the internal and external memory structure of Reddy with the display modes of the present invention. Applicants note that the Examiner's purported motivations (speed and power savings) for applying Reddy would not motivate one to use an off-chip/on-chip structure, but rather would motivate one to use an entirely on-chip structure.

Second, Reddy does not teach the use of internal and external memory for display modes such as color or resolution. Rather, Reddy changes its configuration to accommodate CRT size and moving images. See Reddy, col. 3, lines 1-5 and 39-50. This technique teaches away from the use of the configuration for display modes as recited in claims 1, 15 and 22. Teaching away is "strong evidence of non-obviousness." In re Hedges, 228 USPQ 685, 687 (Fed.Cir. 1986).

Third, applying Reddy to the technique of claims 1, 15 and 22 destroys the very purpose of using the memory structure for fast moving images and CRT sizes. If the internal and external memories are utilized for fast moving portions of the display and CRT sizes, it cannot be utilized for changes in display mode because it is already being used according to the fast moving and slow moving portions and CRT sizes. Obviousness is not proper when the modification of the reference destroys the intent of the reference. In re Gordon (221 USPQ 1125 (Fed. Cir. 1984)

In conclusion, the combination of Reddy with the combination of Crocker and Nale is improper. It is respectfully submitted that independent claim 1 and its dependent claims 2-13, independent 15 and its dependent claims 16-22 and independent claim 22 and its dependent claims 23-30 are patentable over the cited art.

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Applicant believes that the present application is now in condition for allowance.
Favorable reconsideration of the application as amended is respectfully requested.

Atty. Dkt. No. 035451-0198 (3550.Palm) (fka 025782-0102)

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

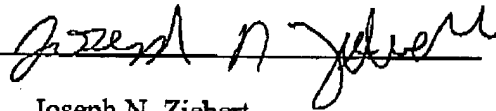
The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1447. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 06-1447.

Respectfully submitted,

Date

9-1-05

By



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